



Bank Note Paper Mill India Private Limited
Registered & Corporate office: Paper Mill Compound,
Entry Gate 1, Note Mudran Nagar,
Mysore-570003
CIN: U21090KA2010PTC055475.

Standard Biding Document (SBD)

Not Transferable

Tender Document for – **Supply of bullet proof jackets & helmets**

e-Tender No. BNPM/TEN/BP helmet & jacket /315/2017-18 dated 04.12.2017

The Tender Document contains Â F Pages

The Tender Document is sold to

M/s
Address

Details of Contact person in BNPM regarding this tender

Name: Alok Kumar

Designation: Deputy General Manager

Address Administrative office Building,
Entry Gate 1, Paper Mill Compound,
Note Mudran Nagar,
Mysore – 570003, Karnataka, India
Phone 0821-2401111
Email info@bnpmindia.com
Website: www.bnpmindia.com



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BANK NOTE PAPER MILL INDIA PRIVATE LIMITED

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BANK NOTE PAPER MILL INDIA PRIVATE LIMITED

Paper Mill Compound, Note Mudran Nagar

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Email info@bnpmindia.com, website: www.bnpmindia.com

(Name, address, telephone no., Fax, e-mail, website etc. of the Unit)

BNPM/TEN/BP helmet & jacket /315 /2017-18 dated 04.12.2017

- Bidders satisfying the technical and commercial conditions specified in the bid and ready to supply the mentioned products in conformity with the Scope of Supply and Technical specification provided in NIT and terms and conditions stipulated herein may submit their commercial quotes as specified in the format of the document. **The closed quote should be submitted electronically only on the BNPM e-Tendering Portal www.tenderwizard.com/BNP within the time:**
- Tenders are invited in two parts (Techno-commercial & Financial) from eligible and qualified tenderers for supply of following Goods:

S.No	Brief Description of Goods/ Services	Qty. with units	Earnest Money Deposit*
1	Supply of bullet proof helmets		Rs. 24,000/- (Rupees twenty four thousand only)
	Small Size Helmet-Not more than 1.25kg	12	
	Medium Size Helmet- Not more than 1.35kg	02	
	Large size Helmet – Not more than 1.45kg	02	
2	Supply of bullet proof jackets		
	Standard Size – 6.31kg	13	
	Large Size – 6.62kg	03	

*The tenderers who are currently registered and, also, will continue to remain registered during the tender validity period with DGS&D or with National Small Industries Corporation, New Delhi /MSME are exempted from payment of earnest money. In case the tenderer falls in these categories, it should furnish certified copy of its valid registration details (with DGS&D or NSIC or MSME as the case may be).

Tender Number	BNPM/TEN/ BP helmet & jacket /315/2017-18 dated 04.12.2017
Type of Tender (Two Bid/PQB/EOI Etc.)	Two Bid
Details of Sales of tender Documents	E - tender
Price of the tender Documents	Rs. 1,000/- + Taxes
Bid Submission Mode	Through e-tendering portal www.tenderwizard.com/BNP
Closing date and time for submission of bids along with supporting documents through e-tendering portal.	26.12.2017



3. Interested tenderers may obtain further information about this requirement from the above office selling the documents. They may also visit our website www.tenderwizard.com/BNP mentioned above for further details.
4. Non-refundable Tender fee is Rs. 1,000/- per set plus applicable taxes. The payment shall be made through Electronic mode only.
5. Aspiring Bidders/Contractors who have not registered in e-tendering should register through the website E - Tendering (www.tenderwizard.com/BNP) for participating in the Online Tenders. The registration charges will be Rs. 3,000/- plus applicable taxes (per year) which needs to be paid through electronic mode only.
6. For details, registration and e-payment, please visit e-tendering website www.tenderwizard.com/BNP or contact e-tendering Helpdesk at 080-49352000 / 96861 15324/ 96861 96756
7. The NIT Form with standard tender documents will be accessible in the e-Tendering website (viz www.tenderwizard.com/BNP).
8. Class III Digital Signature Certificate (DSC) is mandatory to participate in e-Tenders. Participating bidders/Contractors have to make sure that they have the valid DSC. If not, they can procure from any of the RAs approved by CCA.
9. Bidders/Contractors should upload and attach all the Scanned copies of technical documents / certificates in e-tendering website www.tenderwizard.com/BNP pertaining to their eligibility criteria mentioned in the NIT, failing which, the bid will not be considered.
10. For those tenderers whose technical bids do not satisfy the eligibility criteria, their financial Bids will not be opened.
11. The tender shall contain two bid systems each of whose contents shall be as follows.

Prequalification Bid & Techno-commercial Bid should consist of clearly visible scanned copy of:

- i) Bid forwarding letter.
- ii) Power of Attorney in favour of the person who has signed the bid on stamp paper (Rs.100/- non judicial stamp paper)
- iii) Documents to establish conformity with Bidder's Qualification / Eligibility criteria.
- iv) ESIC, PAN details, GST registration certificate, Schedule bar chart
- v) Earnest Money Deposit (To be paid through electronic mode only)
- vi) Deviations from GCC, SCC, SIT, GIT
- vii) Schedule of deviations to technical specifications separately
- viii) Technical details / documents specified in technical part
- ix) Blank copy (Without price) of Schedule of price duly signed & stamped on each page

The bidder should submit the "Prequalification Bid & Techno Commercial bid" in



e-tendering portal.**Financial Bid shall contain.**

- i) Schedule of Prices duly filled in.

The bidder should submit the- "Financial Bid" in e-tendering portal.

12. Tenderers shall ensure that their tenders, duly sealed and signed, complete in all respects as per instructions contained in the Tender Documents, should be uploaded in e-tendering portal (www.tenderwizard.com/BNP) only.

13. In the event of any of the above mentioned dates being declared as a holiday / closed day for the purchase organisation, the tenders will be sold / received / opened on the next working day at the appointed time.

14. The tender documents are not transferable.

Yours Faithfully,

(Alok Kumar)
Deputy General Manger



GIT

BANK NOTE PAPER MILL INDIA PRIVATE LIMITED

SECTION: II

GENERAL INSTRUCTIONS TO TENDERERS

SHEET 1 OF 1

Section II: General Instructions to Tenderers (GIT)

This section-II shall be downloaded from website: www.bnpmindia.com under the section "Corporate Actions" and signed & stamped and submitted along with the Techno-Commercial Bid –Part II as acceptance of terms and conditions.

(Offer without the copies of section-II shall liable to be rejected).



The following Special Instructions to Tenderers will apply for this tender. These special instructions will modify/substitute/supplement the corresponding General Instructions to Tenderers (GIT) incorporated in tender. The corresponding GIT clause numbers have also been indicated in the text below: In case of any conflict between the provision in the GIT and that in the SIT, the provision contained in the SIT shall prevail.

SI No	GIT Clause No	Topic	Substitution / Replaced by
1.	12.5 and 12.6	Tender Prices	1.0
2.	18.0	Earnest Money Deposit	2.0
3.	35.0	Evaluation Criteria	4.0

1. TENDER PRICES:

Tenderer shall quote strictly in INR and as per the attached price schedule. The quoted prices should be inclusive of taxes.

Prices quoted shall be DAP Mysore site basis inclusive of Packing & Forwarding charges, freight, transit insurance and all other charges if applicable.

2. EARNEST MONEY DEPOSIT:

EMD amount should be paid through electronic mode i.e through internet banking, credit card, debit card, etc and also through Bank Guarantee.

The tenderers who are currently registered and, also, will continue to remain registered during the tender validity period with DGS&D or with National Small Industries Corporation, New Delhi /MSME are exempted from payment of earnest money. In case the tenderer falls in these categories, it should furnish certified copy of its valid registration details (with DGS&D or NSIC or MSME as the case may be).

3. EVALUATION CRITERIA:

(i) Techno-commercial bid / Pre Qualification bid shall be opened together and however, the Techno-commercial bid of pre-qualified bidder who meets the eligibility criteria shall be scrutinised and evaluated by the competent committee/ authority with reference to the parameters prescribed in the tender document. Subsequently, in the second stage the financial bids of only technically acceptable offers as decided in first stage shall be opened for further scrutiny and evaluation. Intimation regarding opening of financial bids shall be given to acceptable tenderers to enable them to attend the financial bid opening, if they so desire.

(ii) The method of evaluation of bidder for awarding the Contract shall be on schedule wise and will be decided taking into consideration of the total offered price for delivery up to BNPM, Mysore.

4. Corrigendum/ Addednum, if any, including clarifications provided during pre-bid meeting shall be hosted on Company's website (www.bnpmindia.com) only.



5. The Company discourages the engagement of agents for brokering contracts and hence intending bidders are requested to take note of the above that engagement of agents for brokering contracts may result in dis-qualification.

Following clauses in GIT are not applicable.

SI No	GIT Clause No	Topic	Substitution / Replaced by
1.	12.3 & 12.6	Tender Prices	Not Applicable
2.	13	Indian Agent	Not Applicable
3.	14.3, 14.4, 14.5, 14.6, 14.7	Firm Price/Variable Price	Not Applicable
4.	32	Conversion of tender currencies to Indian rupees	Not Applicable
5.	33	Schedule wise evaluation	Not Applicable
6.	50	Rate Contract Tenders	Not Applicable
7.	53	Expression of Interest (EOI) Tenders	Not Applicable
8.	54	Tenders for Disposal of Scrap	Not Applicable
9.	55	Development and indigenization Tenders	Not Applicable

GCC	BANK NOTE PAPER MILL INDIA PRIVATE LIMITED	SECTION: IV
	GENERAL CONDITIONS OF CONTRACT	SHEET 1 OF 31

Section IV: General Conditions of Contract (GCC)

This section-IV shall be downloaded from website: www.bnpmindia.com under the section “Corporate Actions” and signed & stamped and submitted along with the Techno-Commercial Bid –Part IV as acceptance of terms and conditions. ***(Offer without the copies of section-IV shall liable to be rejected)***



ISSUE
Rs

The following Special Conditions of Contract (SCC) will apply for this purchase. The corresponding clauses of General Conditions of Contract (GCC) relating to the SCC stipulations have also been incorporated below. These Special Conditions will modify/substitute/supplement the corresponding (GCC) clauses.

Whenever there is any conflict between the provision in the GCC and that in the SCC, the provision contained in the SCC shall prevail.

(Clauses of GCC listed below include a possibility for variation in their provisions through SCC. There could be other clauses in SCC as deemed fit)

SI No	GCC Clause No	Topic	Substitution/ Replaced by
1	10	Terms of Delivery	1
2	22, 22.1, 22.2, 22.3, 22.4, 22.6	Terms and Mode of Payments	2
3	23.1,23.2	Delay in Supplier's Performance	3
4	16	Warranty	4

Following clauses in GCC are not applicable

3	11.3	Transportation of Goods	Not Applicable
4	13	Spare Parts	Not Applicable
5	36	Integrity Pact	Not Applicable

1. Delivery Period:

(i) All material shall be delivered within 6 weeks from the date of issue of purchase order.

(ii) It is responsibility of the supplier to arrange transportation and supply the material on DAP, BNPM, Mysore. BNPMIPL requires material on **DAP, BNPM, Note Mudran Nagar, Mysore basis only**. The quoted price should be inclusive of Transit Insurance.

2. Terms and Mode of Payments

100% payment shall be released on receipt and acceptance of goods by the consignee at destination and on production of all required documents by the supplier.

Payments to suppliers shall be made by account payee cheque or through ECS in INR only.



Payment of CGST, SGST, IGST & UTGST related clause:

The suppliers are required to adhere the following procedure in order to honour the payment against CGST, SGST, IGST & UTGST in the invoice:

- i. An invoice issued by the supplier of goods or services or both should be in accordance with the provisions of section 31 of the CGST Act and should contain all the prescribed informations in accordance with Chapter VI of CGST Rules, 2017;
- ii. A debit note issued if any, by a supplier should be in accordance with the provisions of section 34 of the CGST Act;
- iii. The supplier should mandatorily upload the aforementioned documents in GSTR -1, details of outward supplies of goods or services within the prescribed time under GST Act;
- iv. The supplier should provide the relevant documents to confirm the tax charged on the invoice has been paid to the credit of government after adjusting with ITC if any.

Notwithstanding above, the supplier should provide indemnification as follows:

“In the event of non-compliances with respect to GST Act and Rules by the supplier, the purchaser is allowed to adjust the GST amount from retention amount (either in BG or in Cash) held by the company. If no amount is available for recovery, the supplier will refund the GST liability within 10 days from the date of GST reversal in GSTRN”

The above requirements are mandatory to claim any GST liability, failing which, the GST liability will not be paid/reimbursed/accepted.

3. Delay in supplier’s performance

Delay or Non Delivery:

Time is essence of the contract and completion of delivery dates agreed to are binding on the seller. In the event the seller is not able to supply as per the delivery schedules given by BNPM, Purchaser will have a right either to cancel the order without prejudice to any other rights or to make purchase from an alternate source at the risk and cost of the seller.

In case of rejection and failure to replace goods, the order will be treated as incomplete and BNPM may cancel the order and will arrange to purchase the goods from elsewhere at Contractor’s risk and cost and the purchase order/LOI on supplier shall be cancelled and action taken as per the order terms

4. Security Deposit:

Within twenty one days after the issue of Purchase Order/LOI by BNPM, the supplier shall furnish security deposit to BNPM for an amount equal to ten percent of the total value of the purchase order, valid upto 60 days after the date of completion of all contractual obligations by the supplier. Clause No. 6 of GCC refers in this regard.

5. Vendor Perfomance:-

Vendor shall be evaluated for their performance. The performance shall be



based on timeliness of deliveries, quality of the material supplied, technical support, quality of after-sales service if any, replacement of the defective material if any, responsiveness etc.

Based on the above criteria, the vendor shall be rated in category "A", "B" & "C". The vendor with rating "C" shall be disqualified/debarred from participating in the tender for certain period.

6. Price:

Bidder should quote the price taking into consideration of tax & P&F, freight charges. Supplier shall be entirely responsible for tax, fees, GST, levies etc. incurred until delivery of the contracted goods to BNPM.

7. Risk Purchase Clause:

If the Seller fails to abide by the terms and conditions of this agreement, or fails to supply the material as per the delivery schedule or any time repudiates the contract, the purchaser will have the right to

- a) Appropriate the Security Deposit (by invoking the Bank guarantee) deposited by the seller as per clause 6.0 of GCC and procure the tender item from other agencies at the risk and cost of the seller
- b) The cost difference between the alternative arrangement and seller's tendered value will be recovered from the seller along with the other incidental charges.

In case of procurement through alternative sources, and if procurement price is lower, no benefit on this account will be passed on to the seller.

8. Fore-Closure Clause:

If at any time during the continuation of this contract, the use of material ordered in this contract is completely banned or due to drastic change in Government policy its use as, raw material is discontinued or is declared hazardous to public health or cause rising to civil commotion, epidemics, wide-spread strikes and 21 days notice of such eventualities is given by purchaser to the seller, the seller without any right to enforce the contract, will agree to the fore-close the performance of balance portion of this contract and in that event no claim for damages or loss will be lodged against the purchaser.



LOR**BANK NOTE PAPER MILL PRIVATE LIMITED**

SECTION: VI

LIST OF REQUIREMENTS- SCOPE OF WORK

SHEET 1 OF 1

S.No	Brief Description of Goods/ Services	Qty. with units	Earnest Money Deposit*
1	Supply of bullet proof helmets		Rs. 24,000/- (Rupees twenty four thousand only)
	Small Size Helmet-Not more than 1.25kg	12	
	Medium Size Helmet- Not more than 1.35kg	02	
	Large size Helmet – Not more than 1.45kg	02	
2	Supply of bullet proof jackets		
	Standard Size – 6.31kg	13	
	Large Size – 6.62kg	03	

Bullet proof jacket should be provided in two different sizes. A tentative requirement of each size is Standard size jacket – 13 Nos. , Large size jackets – 03 Nos.



Section VII: Technical Specifications

Specifications of Supply of Bullet Proof Helmet

OPERATIONAL CHARACTERISTICS

Ergonomy: It should be possible to wear, adjust and remove the helmet with ease even with gloved hands. It should be provided with a three point chin strap with cotton chin cup.

Shape:- The helmet should adequately cover the neck and ears of the wearer and its design should be on the lines of the US Personal Armour System Ground Troops (PASGT). The shape of the helmet should facilitate the use of hand sets of in-service communication equipment. Helmet should desirably have provision to mount a display system, hands free comm eqpt and fix electro-optical devices as and when required.

Surface Finish and Camouflage- The proposed helmet should be of crinkle mattfinish, in the following colours:-

- (a) Disruptive IA pattern.
- (b) Khakhi/Sand.
- (c) Olive Green.
- (d) White.

Protection- The ballistic helmet should be able to defeat 9mm KF amm fired from Indian 9mm Carbine from 20m. The deformation in the helmet should not exceed 13mm, the min gap necessary between the harness and inner surface of the helmet.

Climatic Condition- The helmet must withstand repeated and sustained exposure to climatic conditions as under:-

- (a) Temperature - -50°C to + 50°C.
- (b) Relative Humidity - upto + 80%.

Use of Optical Instruments- The design of the helmet should be such that it should not obstruct the use of binoculars (day and night), optical sights fitted on the weapons, range finders and Artillery optical instruments like director etc.

Compatibility- The design of the helmet should preferably be compatible to wear along with respirators and chemical hoods. This may be considered as a desirable feature for subsequent improvement and development.

Comfort- The helmet should not cause any undue discomfort even after prolonged wearing by an individual for more than six to eight hours.

Ability to absorb IR Radiation- It is desirable that the helmet should be able to absorb 60 to 100 percent of IR radiations from an active IR source and should not reflect any such radiations.



Weight - The weight of the helmet should be as under:-

- (a) Medium Size helmet - Not more than 1.20 Kgs.
- (b) Large size helmet - Not more than 1.30 Kgs.

Inner Lining/Harness- The helmet should be provided with harness which should be adjustable to head size. The minimum distance between the harness and the inner surface of the helmet should be 13mm. It should be comfortable to wear and ensure air circulation.

Chin Strap- Adjustable chin strap with three point support must be provided. The material of the chin strap should be suitable to Indian weather conditions and should be rugged enough to withstand rough handling in the field. The buckle of the chin strap should be easy to engage/disengage and its position on the cheek should not hinder aiming during firing. The material of the buckle should be harmless to skin in all types of climate temperatures.

Size- The helmet should be provided in two sizes, viz medium and large size. The circumference of the helmet should be adjustable as under:-

- (a) Medium size - 48 to 57 cms.
- (b) Large size - 58 to 62 cms.

Shelf Life- Shelf life of helmet to be minimum 10 years in field conditions.

Provision for Visor- Suitable provisions should exist in the helmet for attaching plastic visor, to provide limited protection against blast and splinters, without increase in weight of the helmet. An additional weight of upto 500 gms for the visor is acceptable. The visor is, however, required on selective basis.

OPERATION AND MAINTENANCE

Packing - The helmet should be packed individually preferably in a water proof carry bag.

User Evaluation - The approval for introduction into service of the proposal helmet will be based on the test procedures as laid down in NIJ Standard 0106.01.HP White Laboratory, UK and the standards set in this GSQR (to be tested in field conditions). However, in case, where different standards have been specified in the GSQR/NIJ/HP White Laboratory, the specifications set out in the GSQR will be considered.

Literature -Literature giving details of the equipment, functioning and handling should be provided at the time of trials. It must also give out details of maintenance requirements.



QRs FOR BULLET RESISTANCE HELMET (BALLISTIC) FOR GROUND TROOPS

1. Ergonomy:-

It should be possible to wear, adjust and remove the helmet with ease even with gloved hands. It should be provided with a three point chin strap with comfortable cushioned chin cup made of appropriate non-abrasive, non-allergic material/double strap of reasonable width. The helmet should adequately cover the neck and ears but it should not impair the hearing. Helmet should be compatible with active ear protection.

2. Shape:-

The helmet should adequately cover the head, neck and ears of the wearer and its design should be on the lines of Modular Integrated Communications Helmet (MICH)/Advanced Combat Helmets (ACH). The shape of the helmet should facilitate the use of handsets within service communication equipment. Helmet should have provision to mount a display system, hands free communication equipment and fix-electro-optical devices and detachable visor as and when required. Vendor should provide a drawing of the helmet along with dimension and surface area for the entire three size helmet.

3. Material:-

Vendor should declare the type of material, number of layers, construction, dimension and weight during tendering process.

Note: - Tenderers must declare number of layers and type of material (Aerial density of material) used for fabricating BR Helmet as per original manufacturer of the material. They have to maintain the same in bulk supplies.

4. Surface Finish & Colour:-

The proposed helmet should be of crinkle matt finish and able to be provided in any of the following colours: -

- (a) Disruptive IA pattern
- (b) Khaki/Sand/Desert Tan
- (c) Olive Green
- (d) White
- (e) Black
- (f) Or any other pattern specified by the user.

5. Protection:-

Protection of helmet against 9x19mm cartridge fired through Sub Machine Gun (Such as Sten Machine, MP-5, Carbine any other variant) from a distance of 5 meters to achieve a muzzle velocity $430 \pm 15\text{m/s}$ and weight of the bullet between 7.4 gram to 8.2 gram. The deformation in the helmet should not exceed 13 mm. The material of the helmet should be fire/flame retardant and water resistant.

6. Climatic Condition:-

The entire helmet must withstand repeated and sustained exposure to climatic conditions. The firm must provide Certificate from the accredited laboratory with regard to temperature and humidity as given below: -

- (a) Temperature - -50°C to $+60^{\circ}\text{C}$ for six hours
- (b) Relative Humidity - up to $+90\%$

7. Use of Optical Instruments:-

The design of the helmet should be such that it should not obstruct the use of monocular/binoculars (day and night), optical sights fitted on the weapons, range finders and Artillery optical instruments as per the requirement of user.



8. Compatibility:-

The design of the helmet should be compatible to wear along with respirators and chemical hoods. The metal/plastic parts if used must be coated and laminated with grade-I insulation. The firm must provide Certificate from the accredited laboratory.

9. Comfort:-

The helmet should not cause any undue discomfort even after prolonged wearing by an individual for more than eight hours. The helmet should not hinder aiming during firing and enable unhindered use of in service optical devices and personal spectacles.

10. Weight:-

The weight of the helmet less the visor should be as under:-

- (a) Small Size Helmet - Not more than 1.25 Kg
- (b) Medium size helmet - Not more than 1.35 Kg
- (c) Large size helmet - Not more than 1.45 Kg

11. Inner Lining/Harness:-

The helmet should be provided with a suspension system which should be adjustable to head size. A removable pad system for suspension, comfort and protection from the deformation as mentioned in the para-5 above should be provided, which should ensure air circulation.

12. Chin Strap:-

Adjustable chin strap with three or four points support must be provided. The material of the chin strap should be suitable to Indian weather conditions and should be rugged enough to withstand rough handling in the field. The buckle of the chin strap should be easy to engage/disengage and its position on the cheek should not hinder aiming during firing. The material of the buckle should be harmless to skin in all types of climate conditions.

13. Size:-

The helmet should be provided in three sizes, viz. Small, Medium and Large size. The circumference of the helmet should be adjustable as under: -

13.1 Head circumference (maximum circumference measurement of the head above the eyebrows)

- (a) Small Size - 48 up to 52 cms
- (b) Medium Size - more than 52 up to 57 cms
- (c) Large Size - more than 57 up to 64 cms

13.2 Sagittal arc (It measures the distance over the top of the head between the glabella to the nuchale, which is the base of the occiput).

- (a) Small Size - 30 up to 35 cms
- (b) Medium Size - more than 35 up to 39 cms
- (c) Large Size - more than 39 up to 44 cms

14. Shelf Life:-

Shelf life of helmet indicated is 10 years in storage conditions. The operational life of 7 years is mentioned in field conditions, because of different climatic conditions and normal wear and tear. In this regard manufacturer has to submit a certificate along

ply.



15. Provision for Visor:-

Suitable provisions should exist in the BR helmet for attaching a protective visor. An additional weight of upto 1.5 Kgs with click system (Tolerance of 10 gms permitted) for the visor alongwith provision for its attachment in the overall weight of the helmet is acceptable. The visor and provision for its attachment in the helmet would be required on selective basis as per user requirement. It should provide protection against ballistic fragments and other flying debris. It should have a clear air passage on the top and bottom to prevent fogging of the visor. It should confirm to confirm to ballistic protection as per the user requirement.

16. User Evaluation:-

16.1 Testing of BR Helmet for **Ballistic Evaluation** will be carried out at CFSL or TBRL, Chandigarh laboratories as per QRs and Trial directive.

16.2 Testing of BR Helmet **Physical Evaluation** should confirm the Indian Standard: 9562-1980 (Reaffirmed 2007) Edition 1.5 (2000- 12).

17. Packing:-

The helmet should be packed individually in a water proof carry bag.

18. Literature/Document:-

Literature giving details of the equipment, functioning and handling should be provided at the time of trials. It must also give out details of maintenance requirements.

19. Warranty: -

Store supplied against this specification shall be deemed to bear the warranty of the supplier against defective design material, workmanship and performance for period of twelve months from the date of receipt of store at consignee end. And if during the specified period, the store supplied is found to be defective, the same shall be replaced immediately with serviceable store by the supplier at site free of any charges as may be decided by the purchasing officer, on recommendation of consignee/Quality Assurance Authority.

20. Note:-

20.1 The QRs and Trial Directives are dynamic/live and may be amended only on the approval of competent authority.

20.2 The QRs/Trial directive has been drawn jointly with the association of CAPFs, DRDO (TBRL, DIPAS), CFSL Chandigarh, AIIMS Delhi and DGQA.

20.3 The level of protection is limited to the 9 mm (Level III A) protection.

Annexure 'A'

PRE-DESPATCH INSPECTION OF SAMPLES

STANDARD OPERATING PROCEDURES FOR TESTING OF BALLISTIC RESISTANCE HELMET (NIJ-III A)



A. General Information:

1. Before commencement of ballistic trial, the Board of Officers/Trial testing team shall brief the participant vendors:-

(a) Testing Equipments and set up.

(b) Testing procedure.

1.1 The vendor has to give satisfactory certificates regarding procedure and test set up of conduct of ballistic test.

1.2 Test will be conducted as QRs and Trial directive as per laid down procedure.

1.3 No deviation shall be allowed.

2. In case the Vendor or his authorized representative has any observation, with regards to procedure/test set up of conduct of trial, the same will be submitted in writing on the spot within half an hour before commencement of trial. Any departure from this will disqualify him from any future representation.

3. Plasticine blocks, instruments, Arms & Ammunitions to be used for ballistic testing will be made available to representative of firms for inspection before commencement of ballistic trial.

4. Only one authorized signatory of firm will be allowed to associate/witness the ballistics trial of the samples submitted by respective firm.

5. The decision of Constituted Evaluation Committee/Board of Officers as appointed by the MHA will be final and binding. The test results will be recorded on the same day and firms' signatory shall be required to sign Compliance Test Report (CTR). No re-testing of tested samples on the firm's and users request will be undertaken.

6. Test sequence of vendors will be decided through draw of lots.

7. Fair and unfair shots will be given due weightage.

8. Drop test will be conducted in presence of authorized concerned vendor.

9. Ballistic trial will be conducted firstly on **Wet** samples followed by **Dry** test.

10. All the events should have Video recording and still Photographs.

11. **Acceptance criteria of Samples:** - From each size (Small, Medium and Large) of 5 B.R. Helmet samples (one for reference, second for physical evaluation, third for wet test, fourth for Dry test and fifth for deformation test) shall be taken, only one-piece chosen at random, will be put through test for all the physical parameter including workmanship and labelling requirements. If that sample meets the physical requirements, the entire lot of particular size would be deemed to have passed for physical parameters. If the sample chosen at random doesn't meet the physical requirements, the entire lot of particular size will be rejected.

11.1 The Compliance Test Report (CTR) form shall be used to record and document the results of the tests. Sequence of testing for BP H will be as under:

(a) Submission of all certificates prescribed in tender inquiry.

(b) Measurement of weight and other physical dimensions

(c) Visual inspection for checking physical deformity and other parameter



11.2 Ballistic Trial: (Note: In case of non-conformity with any of the parameters of the tests mentioned above, the next sequence of test will not be conducted.)

11.3 Labelling: Each set of sample of Ballistic Resistant Helmet shall be durably and legibly marked /labelled. The marking/label shall be depicting following information of indelible nature permanently attached to either exterior surface of the sample.

(a) Name of the manufacturer.	XYZ
(b) Name of the product.	abc
(c) Date of manufacturing	dd.mm.yy
(d) Date of Issue	(to be filled by user)
(e) Protection level	IIIA
(f) Size	Small/Medium/Large
(g) Identification Number	ABCD.....
(h) Standard	MHA QRs & Trial Directive

12. Test Sequence:-

12.1 Physical testing: -Testing of BR Helmet should confirm the Indian Standard: 9562-1980 (Reaffirmed 2007) Edition 1.5 (2000-12). The following sequence of test should be carried out as per **Indian Standard**.

(a) **Workmanship and finish:-** Shape, Make, Design, Workmanship should be o required standard and marking (Manufacturer's name/trade mark, size, year of manufacture, with or without neck protector, with or without visor, Protection level, Helmet serial level) with identification number on each Helmets.

(b) **Mass:** - As per MHA QRs

(c) **Sampling and criteria for conformity:-**The method of sampling and criteria for conformity shall be as specified in IS- 9695-1980.

(d) **Performance requirement:** - As per MHA QRs

12.2 Shock absorption test:- Helmets shall be tested for shock absorption by method described in **Appendix A** within one minute after subjecting them to conditions specified in (a) , (b) and (c) given below :-

(a) A temperature of $65 \pm 2^{\circ}\text{C}$ for 4 hours in an oven.

(b) A temperature of $-10 \pm 2^{\circ}\text{C}$ for 4 hours in a refrigerator, and

(c) Water flowing over the whole outer surface of the BR Helmet for 4 hours.

Appendix A

v-1.1) Apparatus

v-1.2) Wooden Head form-confirming to IS 7692-1975*

v-1.3) A Gauge and Recording Apparatus for Measuring Force-

The gauge and the associated recording apparatus shall have proper time constant to be able to measure the impact loading up to 40 KN (4000 kgf) independent of the time of application of the force and a slow application of the load required for its calibration. The gauge shall have a minimum stiffness of 500 kN/mm (50 000 kgf/mm). The head form shall be mounted on the gauge so that its vertical axis coincides with the vertical axis of the gauge.

Accuracy

v-1.4) The overall error of the whole set up including the load measuring and recording system shall be not more than 10 percent.



v-1.5) Concrete or similar monolithic block having a minimum height of 1 m, length 1 m and width 0.6m, and mass 1ton, shall be used to support the gauge and head form the block shall be bedded on dry sand on a solid floor.

v-1.6) Striker shall be in the form of a rectangular block of wood weighing 45 ± 0.1 Kg and having a horizontal striking face 180 mm square. The striker shall slide freely and without oscillation down two vertical guide wires so positioned that the centre of gravity of the striker lies on the vertical axis of the gauge and both be in plane of the guide wires.

- v-1.7) Method As per Indian Standard
vi) Penetration Resistance: - As per Indian Standard
vii) Strength of Retention system: - Indian Standard
viii) Rigidity test: - As per Indian Standard
ix) Water Absorption Test: - As per Indian Standard
x) Flammability Resistance: - As per IS 9562-1980
xi) Mold and Fungus resistance:- As per Mil Specification

13. Ballistic testing:-

13.1 Back Ground: - Helmets intended for the use by law enforcement officers should provide some level of protection from a broad range of threats, including those incurred during high- speed pursuit, falls from motorcycles, assault with blunt instruments and bullet impacts.

13.2 The Ballistic resistant Testing portion of existing procedures measure the resistance of the helmet to bullet penetration, but not measure the intrusion of the back face of the helmet into the protected area (blunt trauma). Results of Ballistic Resistance Testing of a broad range helmets indicate that this deformation may be extreme and, perhaps, even lethal in nature.

14. Scope : - The scope of this testing procedure is limited to evaluating the ballistic resistance of the BR Helmet regarding penetration by bulleted ammunition and the resistance of potentially lethal, back face intrusion of the helmet into the protected cavity as result of non-penetrating bullet impacts.

15. Applicability:-

15.1 This test procedure applies to BR Helmets intended to resist the direct threats of ballistic impact-bullet penetration and deformation of the helmet into the protected area.

15.2 The injuries to head and cervical spine caused by bullet/projectiles impact, require experimentation which is not possible on living human beings and on cadavers the typical ante-mortem features of the injuries shall not be seen in -situ except the depth of penetration.

15.3 This test procedure is NOT intended to evaluate the level of protection provided by BR Helmets impacted with other than ballistic projectiles, such as clubs or hand-thrown missiles, nor this procedure intended to evaluate the protection from injuries due to deceleration from vehicular collisions, falls from vertical heights, or falls from moving vehicles.

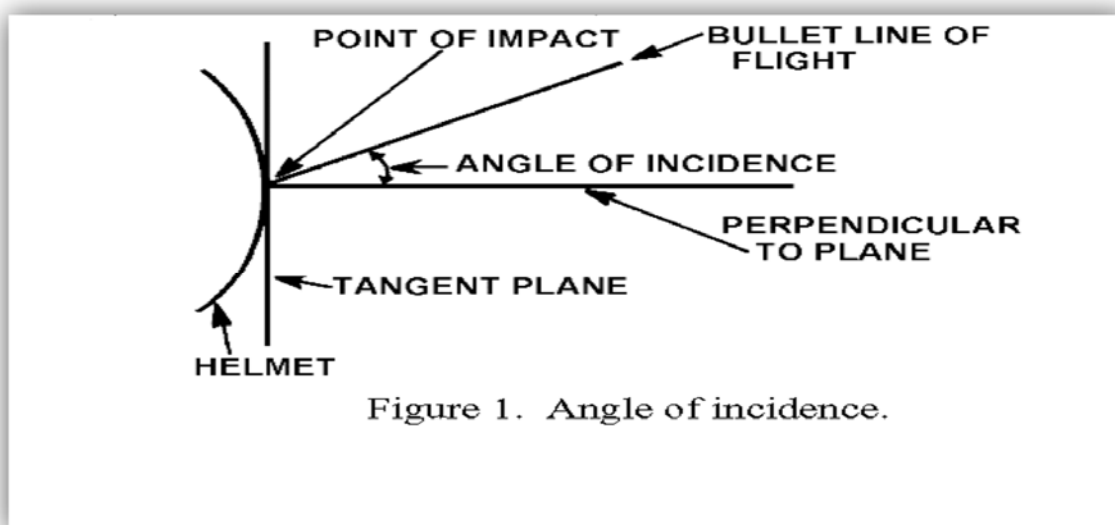
15.4 While Bullet Resistant Helmets may provide some level of protection from non-ballistic impacting and from the collateral, biomechanical injuries related to accelerations and decelerations of the head and BR Helmet, no such protection is implied nor warranted by



this test procedure. Concern for this type of protection should be evaluated using test methodologies and evaluation criteria specifically intended for that purpose.

16. Reference documents

- 16.1 NIJ Standard for Body Armour, NIJ-STD-0101
- 16.2 NIJ Standard for Ballistic Helmets, NIJ-STD-0106.00
- 16.3 H.P White Laboratories, HPW-TP-0401.01.B
- 16.4 Mil Specification 810/810G.
- 16.5 Indian Standard 9562-1980.



17 Definitions

17.1 Angle of incidence: - The angle between the line of flight of a bullet and the perpendicular to the plane tangent to the point of impact.

17.2 Basic Plane: - The plane through the centres of the external opening and the lower edges of the eye sockets.

17.3 Back Face Deformation (BFD) : - The maximum indentation in the backing material caused by a non-perforating impact on the BR Helmet. The BFD is the perpendicular distance between two planes. One plane contains the reference point on the surface of backing material and the other contains the point that represents the deepest indentation in the backing material.

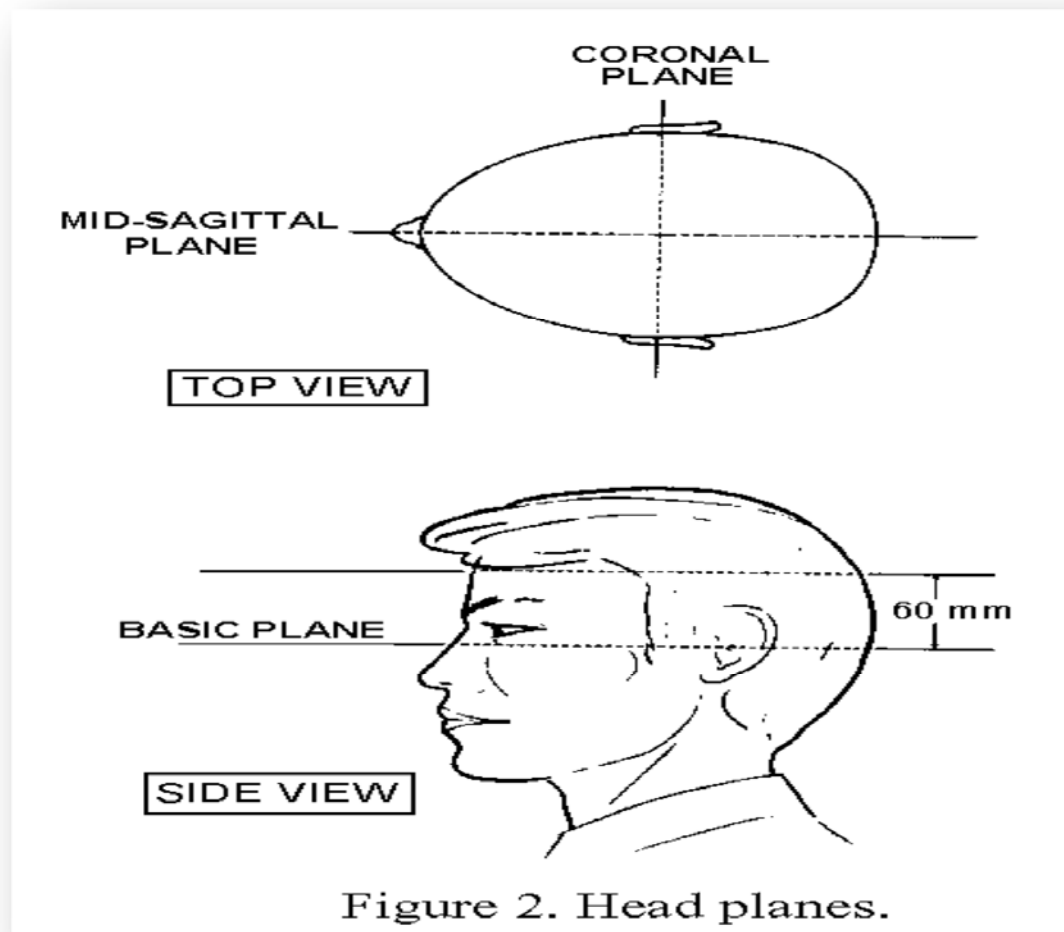


Figure 2. Head planes.

17.4 Backing Material: - Homogenous oil based modelling clay (Roma # Grey), properly conditioned according to NIJ standards is filled up in the head-form used during ballistic testing.

17.5 Coronal Plane: - The plane, perpendicular to the basic plane and mid-sagittal planes, which passes through the centres of the external ear openings.

17.6 Full Metal Jacketed (FMJ) :- A bullet made of lead completely covered, except for the base, copper alloy (approximately 90% copper-10% zinc).

17.7 Jacketed Soft Point (JSP) A bullet made of completely covered, except for the point, with copper alloy (approximately 90% copper-10% zinc).

17.8 Mid-sagittal Plane: - The plane, perpendicular to the basic and coronal planes, which symmetrically bisect the head.

17.9 Penetration: - Any portion of the projectile material which passes through the helmet.

18. Shot, Fair:- An projectile of the specified construction and specified velocity impacting at the specified angle of obliquity and intended shot impact location on the sample, also to include:-

18.1 The projectile which produces a penetration having less than reference velocity shall be declared a fair shot.

18.2 Projectile striking at a greater angle of obliquity than that specified which produces a penetration shall be declared a fair shot.

18.3 Projectile striking at velocities greater than the specified maximum which **DOES NOT** penetration shall be declared a fair shot.

19. Shot, Unfair: - Any of the following categories of shot shall be declared unfair and shall not be used in evaluating the test samples-

19.1 Any shot which penetrates at a velocity greater than the maximum specified.

19.2 Any non-penetrating shot at velocities less than the minimum specified.

19.3 Any otherwise fair shot which penetrating sample which strikes that sample within 1.0-inch of the edge of the sample (Center of impact to edge).

19.4 Any otherwise fair shot which penetrating a test sample that has been previously impacted with five or more prior shots.

19.5 Any otherwise fair shot which penetrates sample which strike that sample within 1.0-inch of the edge of the sample (centre of impact to edge).

20. Ambient Condition

Unless otherwise specified the ambient conditions are kept as below:-

Temperature $23^{\circ}\text{C} \pm 3^{\circ}\text{C}$

Humidity $50\% \pm 20\%$

21. Conduct of Test - Preparation of Plasticine and drop test:-

21.1 Backing Material Calibration: - Calibration of the Plasticine clay backing material will be accomplished before and after each sequence of firing. Calibration will be accomplished using the equipment and techniques specified below:-

a) Drop weight: Steel Sphere

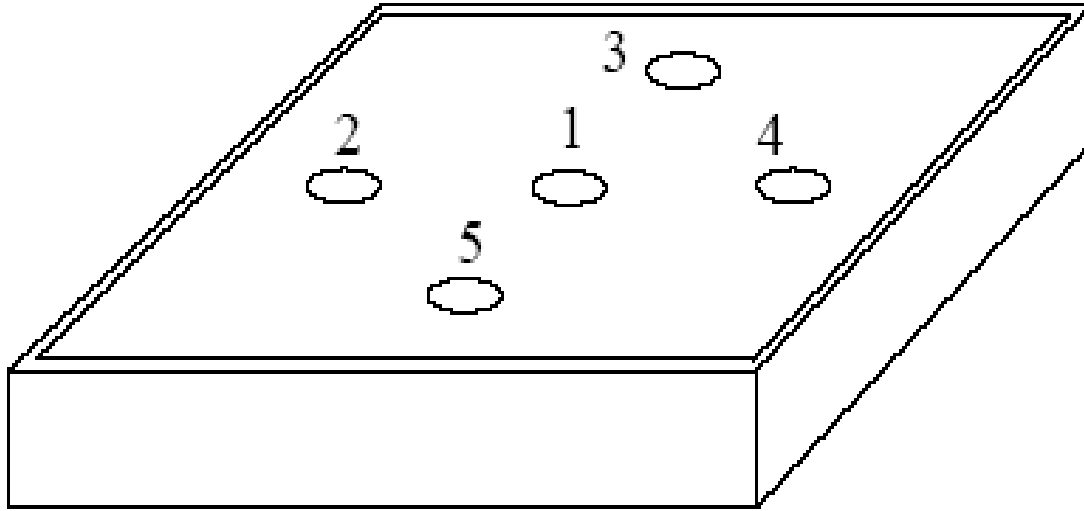
b) Drop weight size: $63.5\text{mm} \pm 0.05\text{mm}$ in diameter

c) Drop weight mass: $1043\text{ g} \pm 5\text{ g}$

d) Drop height: 2.0 m

e) Drop spacing: Minimum of 76 mm from fixture edge to indent edge and a minimum of 152 mm between indent centres.





Each calibration drop will consist of a free fall of the steel sphere onto the conditioned backing material. A minimum of five drops will be completed with the five drop arithmetic mean depth of depression to be 20 ± 3 mm at 30 ± 2.9 degree centigrade.

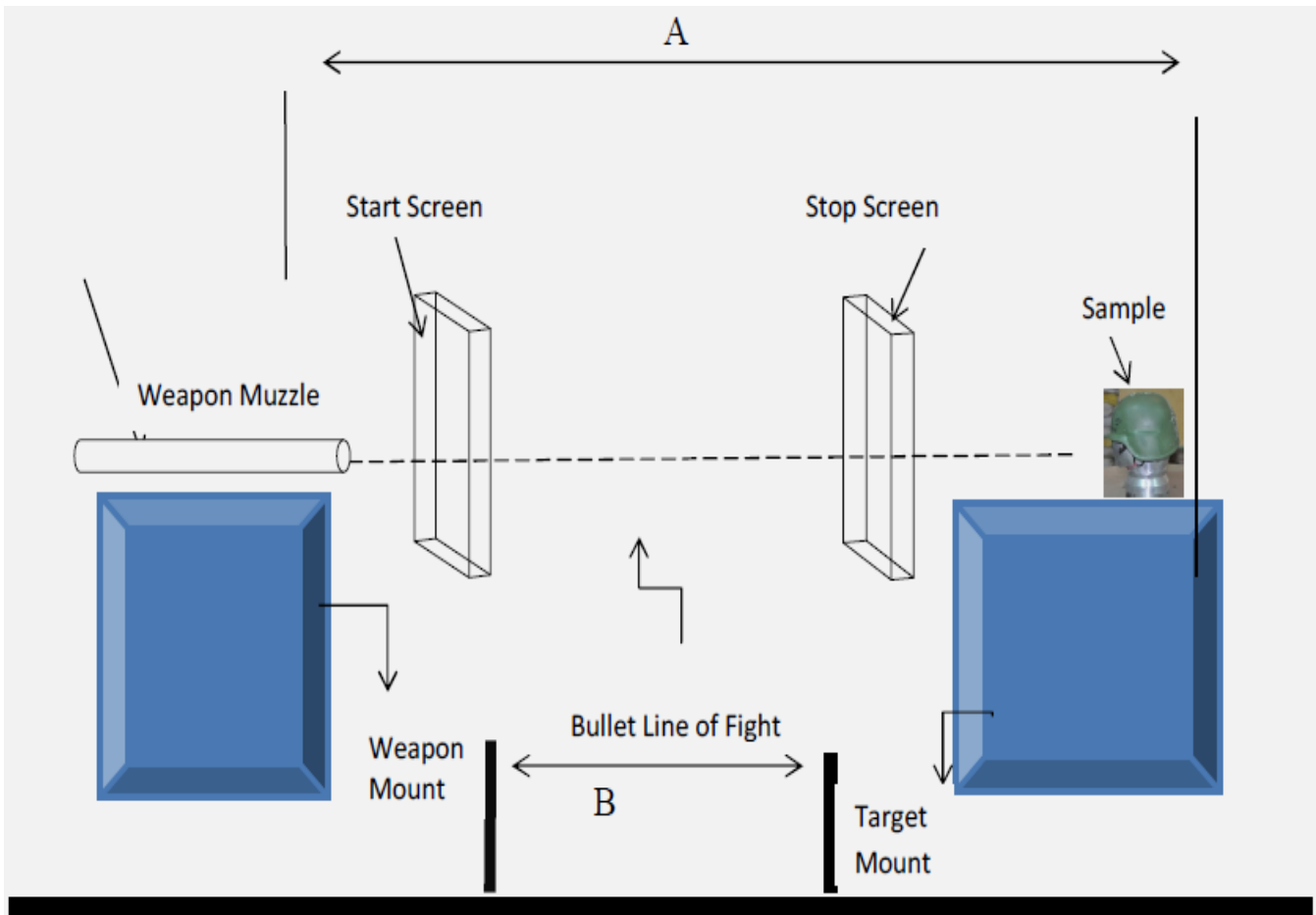
21.2 The Helmets testing is carried out for the threat level III-A with arms and ammunitions whose detail are given below in the table:-

Threat Level	Ammunition		Weapon	Bullet Weight	Muzzle Velocity	Required Fair Hits Per Helmet Part
	Calibre	Type				
III-A	9x19 mm	FMJ	9mm Sub machine gun (Sten machine, MP-5 , carbine any other variant) MP 5	Between 7.4 to 8.2 gram	430 \pm 15 meter/second	05

22. Range Configuration:-

Range Setup

The test range is setup as per Figure 4. Unless specified otherwise, for low velocity threats/ handgun rounds, the panel is mounted at a distance of 5.0 ± 0.1 m from the muzzle of the weapon. For high velocity/ rifle rounds, the panel is mounted at a distance of 10.0 ± 0.1 m from the weapon.



A ➔ $5 \pm 0.1\text{m}$ for low velocity threats/rifle rounds.

B ➔ Adjustable distance to meet velocity requirements.

23. Test Procedure:- As per MHA QRs & Trial Directive

23.1 In preparation for this test, five impact areas are to be marked on BR Helmet.

23.2 Crown- Six inch diameter circle centered about a point on the top of the BR Helmet which intersects the coronal and sagittal centerline

23.3 Front- 45 degrees on either side of the sagittal centerline extending from the crown marking to the lower edge.

23.4 Rear- 45 degrees on either side of the sagittal centerline extending from the crown marking to the lower edge.

23.5 Sides- The right and left side areas between the front and rear areas extending from the crown to the lower edge.

The channels (slots) in both the coronal and sagittal planes of the head form intended for the use in the deformation testing shall be packed with Plasticina modelling clay, ensuring there are no voids, cavities or depression in the final contoured assembly.



23.6 Prior to initiation of testing, the drop verification sample shall be drop tested on filled with plasticine to confirm its consistency.

23.7 The BR Helmet test sample shall be positioned on a rigidly mounted clay-filled test head form at a distance of 5 meters from the muzzle of a test barrel or weapon to produce zero degree of obliquity impacts. The manufacturer installed strapping system shall be used to affix the BR Helmet to head form.

23.8 Fire a sufficient number of pre-test rounds (minimum of three) to ensure that the test round will strike the armour with a velocity within the specified velocity range.

23.9 Wet Test: - The BR Helmet sample should immerse in water as per laid down procedure (2 hours immersion in water). First shot should fire within 10 minutes after taking out BR Helmet sample from water and all the shots should fire within 30 minutes.

23.10 After first shot, the BR Helmet shall be removed from the head form and the depth of the depression with respect to the original surface of the clay determined. Maximum deformation shall be recorded to the nearest millimetre. In making this determination, any clay surrounding the impression which has been raised above the original level of the surface shall be ignored. Measurement of the magnitude of the resultant depression (if any) shall be made from a point originating from a radius flush and consistent with the contour of the pre- shot clay surface. If required, the clay shall be replaced and/or smoothed prior to the next shot. If there is penetration and shot is fair, the testing shall be terminated.

23.11 The BR Helmet shall then be remounted for the next shot. After each shot as till the last shot is fired, deformation shall be measured every time. If there is penetration at any of shot being 'fair', the testing shall be terminated

23.12 Additional shot within one or more of the defined locations may be necessitated as a result of the any of the shot being declared 'unfair'. If there has been no prior fair shot penetration, a penetration by second shot at any location shall be lead to termination of the test of that BR Helmet sample.

23.13 Data for all shots- Fair and Unfair - shall be reported and penetration or excessive deformation in any of the fair shot shall be used to fail the design.

24. Measurement of Deformation:-

After each fire, BR Helmet is removed and without disturbing Back Face Deformation is measured.





25. The test methodologies adopted in this Document by and large follows the procedures laid down by NIJ Standards and HP White Lab and procedures of concerned testing laboratory.

Section VII: Technical Specifications

SPECIFICATION FOR BULLET PROOF JACKETS

DESIGN PARAMETERS FOR BP JACKETS

- A. Shall conform to NIJ Standard of Ballistic Resistance of Personal Body Armour (NIJ Standard – 0101.04 updated revision 'A' & 'B').
- B. Protection against all of the following weapons:
- (i) 9 mm bullet fired through Sten Machine Carbine from a distance of 5 meters;
 - (ii) 12 bore shot (solid slug) fired through full length shotgun from a distance of 10 meters;
 - (iii) 7.62mm bullet NATO ball ammunitions fired through 7.62mm SLR from a distance of 10 meters; and
 - (iv) 7.62mm mild steel core bullet fired through AK series rifles from a distance of 10 meters.
- C. Vest should have the components mentioned in para E below. Each component should be made of multi layers of same material. Each layer will be in single piece and of equal shape and size to maintain uniform thickness all over area up to edge level.
- D. **SIZES OF SOFT ARMOUR PANEL (SAP): STANDARD AND LARGE.**
- E. **AREAS OF COMPONENTS OF SOFT ARMOUR PANEL**

Coverage area of the soft armour panel as per the sizes will be as under:

S. No.	PANEL	STANDARD SIZE (Sq.Mtr.)	LARGE SIZE (Sq.Mtr.)
1	FRONT	0.15	0.18
2	BACK	0.24	0.26
3	COLLAR (TOTAL)	0.06	0.06
4	SHOULDER (TOTAL)	0.04	0.04
5	GROIN	0.06	0.06
	TOTAL	0.55	0.60

However, drawings of the various components of BP jacket are enclosed as appendix-'A' for guidance purpose in respect of its dimensions.

- (i) Negative tolerance in terms of area measurement is not permissible.
- (ii) Measurements will be made with the help of scaled drawing on graph paper and using planimeter.

- F. **WEIGHT OF THE JACKET**



Total weight of BP Jacket including HAPs, SAPs, trauma pads and outer carrier should not exceed as mentioned below:-

- (i) Standard size - 6.31 kg
- (iii) Large size - 6.62 kg

Positive tolerance in weight is not permissible.

G. Size of Hard Armour Panel –305mm X 254mm

Negative tolerance in dimensions of HAP is not permissible.

H. Shall consist of an outer carrier, removable Soft Armour Panels of aramid fibre and two High Performance Polyethylene Plates.

BP JACKET - CONSTRUCTION:

- (i) It shall provide protection to front, back torso and groin, full sides, upper shoulders, neck and collar. Besides neck & collar protection, it should not restrict the vertical movement of the neck of the wearer.
- (ii) Shall be light weight and comfortable providing optimum mobility and speed.
- (iii) Adjustable at the shoulders, waist and groin with appropriate fasteners (Velcro's). An adjustable nylon belt of minimum 10 cm width should be provided with double locking of jacket with velcro.
- (iv) **The vendor has to declare the type of materials, number of layers and their aerial density in technical bid of tender and they have to maintain the same in bulk supply.**
- (v) SAP should be encased in polyurethane coated materials so as to make it water proof.
- (vi) **VELCRO FASTENERS**
All the clothing flaps of the jackets should have high quality velcro fasteners, so that it can be worn and taken off easily/quickly. The peel and shear strength of the Velcro used shall not be less than 250 newton/cm² and 1300 newton/ cm² respectively when tested as per **IS: 8156-1994**. (The IS: 8156-1994 may be available in the office of Bureau of Indian Standards).
- (vii) **POCKET WITH FLAPS**
The jacket should be provided with two external pockets in outer carrier to house two magazines of 5.56mm LMG in each pocket. Two pockets should also be provided to accommodate one grenade (HE 36) in each pocket. The size of each magazine is 19 cm X 7.6cm X 3.5cm and size of HE 36 grenade is 110 mm X 65 mm.
- (viii) **BELT/KAMARBANDH**
An additional belt of nylon/polyester weaving with minimum width of 10 cm inches should be provided around the waist to properly secure the B.P. jackets with the body of the wearer around waist, so that weight of jacket is



distributed on waist/shoulders. **Kamarbandh should be of same material as outer carrier with velcro.**

- (ix) Two pouches (one each on front and rear of outer carrier) should be provided to accommodate two 305 mm x 254 mm Hard Armour Plates so that jacket protects vital organs of body. .
 - (x) Ballistic panels (SAPs & HAPs) shall be removable from outer carrier.
 - (xi) Outer carrier shall be machine washable
- (xii) **TRAUMA PAD FOR TRAUMA ATTENUATION**
- (a) Trauma pad must be provided behind the SAPs, so that it remains to body surface to provide proper cushioning.
 - (b) It must cover uniformly up to edge level of the SAPs.
 - (c) Trauma pad will be made of specified material (non-woven 100% polyester staple fibre wadding), whose details are enclosed at appendix-B. **Placement of trauma pad/ additional layers at any other place is not permissible.**
 - (d) Trauma level should not exceed 25 mm in plasticine block at 30 ± 2.9 degree centigrade temperature of plasticine.
 - (e) **Drop test will be carried out as specified in NIJ standards.**

MATERIALS

- The outer carrier shall be made of high tenacity, heavy duty, abrasion resistant and 100% vest integrity fabric PU coated Nylon.
- The fabric shall be treated for protection against water, fire (fire retardant) and ultra violet rays' exposure.
- The fabric must be suitable to wear in the Indian conditions of heat, rain and humidity.
- The inner side (body side) shall also be of a similar fabric and shall be treated for moisture and water repellency.
- The cloth of the carrier must be pre-shrunk before stitching.

Note:

- (1) **The methods of testing criteria for measuring the properties of outer carrier shall be as per IS: 11871-1986, IS: 3417-1979 (reaffirmed 1997), IS: 392-1989 and IS 391 – 1975.**
- (2) **BP Jackets should be UV resistant.**

VEST FIT:

- The overall length of the BP jacket shall be such that there is no "ride up" while sitting.
- The overlapping degree of front and rear panels shall be such as to provide for maximum freedom of movement.

COLOUR: CAMO. The bidders will submit samples of BP Jackets of any camo colour. However, before placement of bulk supply order, exact camo colour alongwith modifications required, if any, in outer carrier will be intimated.



LABELLING: The outer carrier and the two soft Armour panels must be labeled as per NIJ standards giving the following details.

Name of the Manufacturer: -
Name of the Product:
Date of Manufacturing:
Date of Issue:
Threat level:
Size:
Serial No:
NIJ Standard:
Strike face of jacket should be clearly marked

Note: Tenderers must declare number of layers and type of material (aerial density of material) used for fabricating Soft Armour Panel and Hard Armor Panel as per original manufacturer of the material. Raw Material Assurance Certificate (RAMC) must be given from original manufacturer in respect of material for SAP and HAP, valid for a period of six months from the closing date of tender. The vender has to declare the numbers of layers used for fabricating SAP and HAP of tender samples and they have to maintain the same in bulk supplies.



HARD ARMOUR PLATE (HAP)

- Shall be made of high performance polyethylene fiber.
- Shall provide NIJ threat level III protection against fire of 7.62 mm SLR and 7.62 mm AK Rifles from a distance of 10 meters in conjunction with Soft Armour Panel.
- Each plate should not weigh more than 1.5 kg.
- Shall be of minimum size 305mm x 254mm to cover the vital parts of the body.
- Curvature of the HAP shall be suitable to fit the body contour.
- HAP shall be shielded in tightly sealed, water repellent and PU coated heavy duty fabric so as to make it completely water proof.

OTHER STIPULATIONS

JACKET STYLE	:	POLICE
SERVICEABILITY	:	10 YEARS (HAP, SAP & trauma pad)
GUARANTEE	:	The Outer Carrier along with trauma padding shall be guaranteed for a period of 2 years against all manufacturing defects
TEMPERATURE	:	-50 C to +50 C
HUMIDITY	:	95% at 40 C
STORAGE	:	Normal Room Temp.

IMMUNITY LEVEL:

- (a) Hard Armour Plates: The HAPs are to be tested in conjunction with SAPs.
- Six bullets NATO ball (9.6gms) fired from 7.62 MM SLR from a distance of 10 meters at zero angle of incidence.
 - Six bullets (mild steel core) fired from 7.62 mm of AK rifle from a distance of 10 Mts. at zero angle of incidence on separate plates.
 - It should stop the single shot (rifle slug) fired centrally on HAP through 12 bore full length shot gun.
- (b) Soft Armour Panels:
- Six shots fired through 9 mm Sten Machine Carbine from a distance 5 meters.
- **The velocities of bullets fired through weapons are given as follows:**

Armour Type	Test Bullet	Bullet weight	Reference Velocity (± 9.1 m/s)	Hits per Armor part at 0° angle of incidence	BFS* Depth Maximum	Shots per Panel
III A	9mm	8.2 g	436m/s	4	25 mm	6

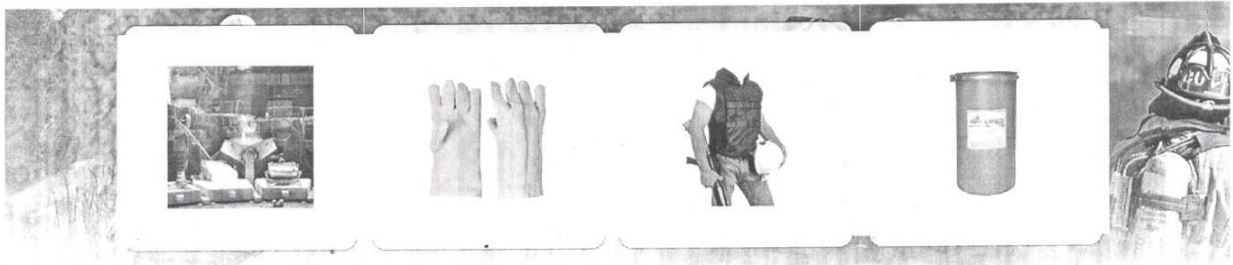


	FMJ RN					
III	7.62mm NATO FMJ	9.6g	838m/s	6	25 mm	6
	7.62mm mild steel core bullet	7.91g	715 m/s	6	25 mm	6
Shot Gun	12 Bore solid Slug	28.4 g	435 m/s	1	25 mm	1

- **BFS – Back Face Signature on Plasticine.**
- **Selected weapon and lot of ammunition, for which reference velocity has been once achieved, will remain the same throughout ballistic testing of all tender samples of various firms.**

Testing Criteria

- Scientific inspection/ballistic trial of these BP jackets will be conducted as per NIJ standard 0101-04 incorporating revision 'A' & 'B' for BP jackets.
- Groin Pad will be tested ballistically with 9mm SMC. Three evenly spaced fair hits at zero degree angle of incidence shall be taken and BFS should not exceed 25 mm.



Home Page

Company Profile

Our Products



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Light Weight Bullet Proof Jacket



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Product Specification

Riding on our excellent industrial experience of three decades, we are a renowned manufacturer and supplier of an innovative collection of **Bullet Proof Jacket**. These jackets are manufactured using optimum quality fabrics and cutting-edge technology under the supervision of skilled personals. Ergonomically designed our **Bullet Proof Jacket** provides full protection to throat, shoulder, bicep, front, rear, side and groin. Owing to attributes like low maintenance, lightweight and rugged design, these jackets are appreciated in the international markets like Kuwait, Qatar, Saudi Arabia and U.A.E.

Further Details

The bullet proof jacket offered by us is resistant of a bullet/ammo 7.62 x 51 mm fired from 7.62mm SL and 7.62 x 39mm fired from a distance of 10 mtrs. We assures that these are made by using the best quality PE UD, Kevlar UD, Twaron UD, etc that are sourced from the authenticated vendors. Our offered bullet proof jacket is safe and reliable which covers Front/ Back/ Shoulders/ Neck/ Groin These are widely appreciated in the market for its high tenacity, flame resistance, outstanding UV resistant, comfort and long service life.

Salient Features:

- User-friendly
- Water resistance
- Moisture-proof
- Smooth texture

Specifications:

Send Inquiry



QCR	BANK NOTE PAPER MILL INDIA PRIVATE LIMITED	SECTION: IX
	QUALITY CONTROL REQUIREMENTS – COMPLIANCE STATEMENT	Sheet 1 of 1

Quality control requirements must be in accordance with Technical Specification mentioned in this tender document.

I confirm that if successful, I shall supply bulletproof jacket and helmet of required make exactly as per Technical Specifications (Section VIII) above.

I understand that if I don't supply the material as per above technical specifications, BNPM reserves the right to initiate action as per extent rules including cancellation of order and forfeiture of security deposit.

We also confirm that we abide by all the tender conditions and we do not have any counter conditions.

Yours faithfully,

.....

(Signature with date)

(Name and designation)

Duly authorized to sign tender for and on behalf of



ISSUE
R6

The pre-qualification criteria for the same are given as under:

Individual/ firm/ company/ corporate other than limited company/ manufacturer/ authorised distributor/representative intending to bid should be bonafide, experienced, technically competent, resourceful and financially sound to carry out the assigned order.

The bidder should be:-

- a) Registered under GST
- b) Having valid permanent Income Tax A/c No. as allotted by the Income Tax Authority of Government of India.
- c) Not blacklisted/ debarred by BNPM/ Bharatiya Reserve Bank Note Mudran (P) Limited (BRBNMPL) / Security Printing & Minting Corporation of India Limited (SPMCIL) or any Govt. Departments and
- d) Original equipment manufacturer (OEM) OR His authorised Distributor/dealer in India.

e) **The detailed qualifying criteria are furnished below:**

Experience & Past Performance	<p>Bidder must have manufactured/ supplied at least 05 BP jackets or 05 BP helmets of similar type during last five years period ending 30.11.2017.</p> <p>Bidder should be an Original Equipment Manufacturer (OEM)/ authorised distributor/delaer in India.</p> <p>Documentary proof for the same shall be enclosed in the offer.</p>
Financial Standing	<p>Average annual turnover of the bidder firm during last three years period ending 31-03-2017 should be more than Rs.3,50,000/- (Rupees Three lakh fifty thousand only)</p> <p>Bidder Firms should not have suffered any financial loss for more than one year during the last three years period ending 31.03.2017.</p> <p>Net worth of the firm should not be in negative on 31.03.2017 and should have not eroded by more than 30% in the last three years period ending 31.03.2017.</p>

Note: In case of non-availability of audited balance sheet for the financial year 2016-17. A provisional balance sheet and Profit / (loss) statement for the financial year 2016-17 duly signed by competent authority shall be submitted.

(Bidder shall qualify all the i.e. technical, financial and other pre-qualification criteria)

Note -1:

All experience, past performance and capacity/ capability related/ data should be certified by the authorised signatory of the bidder firm. The credentials regarding experience and past performance to the extent required as per eligibility criteria submitted by bidder may be verified from the parties for whom work has been done.



Scanned Documents to be uploaded in support of Pre-qualification Criteria

The following documents should be submitted by the firm to prove the pre-qualification criteria.

- a) Company's Profile including details along with copy of following documents:
 - a) Certificate of Incorporation/ Registration
 - b) Constitution of business, in case of business in individual name
 - c) Partnership deed , in case of partnership
 - d) Memorandum of Association and Articles of Association, in case of Limited company
 - e) Memorandum of Association by corporate other than Limited company
- b) In support of technical standing copy of purchase order/work order/agreement and/ or work completion certificate issued by competent authority of the customer duly certified by authorised signatory.
- c) In support of financial standing copies of audited balance sheets and Profit & Loss account should be certified by authorised signatory. In case of unaudited balance sheet, same should be certified by certified accountant's e.g. Chartered Accounts (CA) in India and Certified Public Accountant/ Chartered Accountants of other countries.
- d) Declaration that the firm has not been blacklisted/ debarred by BNPMIPL/ BRBNMPL /SPMCIL or any Govt. Departments duly signed by authorised signatory. (Annexure I)
- e) Declaration towards acceptance to terms & conditions of tender (Annexure II)
- f) Compliance Format (Annexure III)
- g) Copies of PAN and GST Certificates etc. to be submitted along with the bid.
- h) Format for the annexures indicated in the preceding paragraphs are available in section XX which the bidder may refer to.
- i) Any other relevant document the firm wishes to submit

Bidder to furnish stipulated documents in support of qualifying criteria. Non-submission or incomplete submission of documents may lead to rejection of offer.

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BANK NOTE PAPER MILL INDIA PRIVATE LIMITED

SECTION: X

(ACCEPTANCE OF TERMS & CONDITIONS)

SHEET 1 OF 1

To

Date _____

Bank Note Paper Mill India Private Limited
Administrative Building, Entry Gate 1,
Paper Mill Compound,
Note Mudran Nagar,
Mysore - 570003

Ref: Your Tender document No.....dated.....

We, the undersigned have examined the above mentioned tender enquiry document, including amendment No. -----, dated ----- (if any), the receipt of which is hereby confirmed. We now offer to supply and deliver..... (description of goods and services) in conformity with your above referred document for the sum as shown in the price schedule(s), attached herewith and made part of this tender.

If our tender is accepted, we undertake to supply the goods and perform the services as mentioned above, in accordance with the delivery schedule specified in the List of Requirements.

We further confirm that, if our tender is accepted, we shall provide you with a performance security of required amount in an acceptable form in terms of GCC clause 6, read with modification, if any, in Section V- "Special Conditions of Contract", for due performance of the contract.

We agree to keep our tender valid for acceptance for a period up to -----, as required in the GIT clause 19, read with modification, if any in Section-III -"Special Instructions to Tenderers" or for subsequently extended period, if any, agreed to by us. We also accordingly confirm to abide by this tender up to the aforesaid period and this tender may be accepted any time before the expiry of the aforesaid period. We further confirm that, until a formal contract is executed, this tender read with your written acceptance thereof within the aforesaid period shall constitute a binding contract between us.

We further understand that you are not bound to accept the lowest or any tender you may receive against your above-referred tender enquiry.

(Signature with date)

(Name and designation)

Duly authorized to sign tender for and on behalf of

Bidder shall use this covering letter while submitting the offer.



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BANK NOTE PAPER MILL INDIA PRIVATE LIMITED

SCHEDULE OF PRICE

SECTION XI

SHEET 1 OF 1

Prices are to be quoted in the price bid format given in the e-tender website (www.tenderwizard.com/BNP)

QUEST	BANK NOTE PAPER MILL INDIA PRIVATE LIMITED	SECTION: XII
	QUESTIONNAIRE	SHEET 1 OF 1

The tenderer should furnish specific answers to all the questions/ issues mentioned below. In case a question/ issue does not apply to a tenderer, the same should be answered with the remark “not applicable”.

Wherever necessary and applicable, the tenderer shall enclose certified copy as documentary proof/ evidence to substantiate the corresponding statement.

In case a tenderer furnishes a wrong or evasive answer against any of the under mentioned question// issues, its tender will be liable to be ignored.

1. Brief description of goods and services offered:
2. Offer is valid for acceptance up to
3. Your permanent income tax A/c no. as allotted by the Income Tax Authority of Government of India
(Please attach certified copy of your latest/ current Income Tax clearance certificate issued by the above authority)
4. Status:
 - a) Are you currently registered with the Directorate General of Supplies & Disposals (DGS&D), New Delhi, and/ or the present BNPMIPL and/ or the Directorate of Industries of the concerned State Government for the goods quoted? If so, indicate the date upto which you are registered and whether there is any monetary limit imposed on your registration.
 - b) Are you currently registered under the Indian Companies Act, 1956 or any other similar Act?
(Please attach certified copy (s) of your registration status etc. in case your answer (s) to above queries is in affirmative.
5. Please indicate name & full address of our Banker(s)
6. Please state whether business dealings with you currently stand suspended/ banned by any Ministry/ Dept of Government of India or by any State Govt.

.....

(Signature with date)

(Full name, Designation & address of the person duly authorised sign on behalf of the tenderer)

For and on behalf of

.....

(Name, address and stamp of the tendering firm)

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BANK NOTE PAPER MILL INDIA PRIVATE LIMITED

SECTION: XIII

BANK GUARANTEE FORM FOR EMD

SHEET 1 OF 1

NOT APPLICABLE TO THIS TENDER DOCUMENT



To

Bank Note Paper Mill India Private Limited
Administrative Building, Entry Gate 1,
Paper Mill Compound, Note Mudran Nagar,
Mysore – 570003

Dear Sirs,

Ref. Your Tender document No.....dated

We,, who are proven and reputable manufacturers of (name and description of the goods offered in the tender) having factories at.....hereby authorise Messrs (name and address of the agent) to submit a tender, process the same further and enter into a contract with you against your requirement as contained in the above referred tender enquiry documents for the above goods manufactured by us.

We further confirm that no supplier or firm or individual other than Messrs. (name and address of the above agent) is authorized to submit a tender, process the same further and enter into a contract with you against your requirement as contained in the above referred tender enquiry documents for the above goods manufactured by us.

We also hereby extend our full warranty, as applicable as per clause 16 of the General Conditions of Contract read with modification, if any, in the Special Conditions of Contract for the goods and services offered for supply by the above firm against this tender document.

Yours faithfully,

[Signature with date, name and designation)

For and on behalf of Messrs

.....

[Name & address of the manufacturers]

Note: This letter of authorisation should be on the letter head of the manufacturing firm and should be signed by a person competent and having the power of attorney to legally bind the manufacturer.



BG-PS

BANK NOTE PAPER MILL INDIA PRIVATE LIMITED

SECTION: XV

BANK GUARANTEE FORM FOR PERFORMANCE SECURITY

SHEET 1 OF 1

..... (Insert: Bank's Name, and Address of Issuing Branch or Office)

Beneficiary:

Bank Note Paper Mill India Private Limited
Administrative Building, Entry Gate 1,
Paper Mill Compound, Note Mudran Nagar,
Mysore - 570003

Date:.....

Performance Guarantee No.:

WHEREAS.....(name and address of the supplier) (hereinafter called "the supplier") has undertaken, in pursuance of LOI (Letter of Intent) no..... dated to supply (description of goods and services) (herein after called "the contract").

AND WHEREAS it has been stipulated by you in the said LOI that the supplier shall furnish you with a bank guarantee by a scheduled commercial bank recognized by you for the sum specified therein as security for compliance with its obligations in accordance with the LOI;

AND WHEREAS we have agreed to give the supplier such a bank guarantee;

NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of (amount of the guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand. We further agree that no change or addition to or other modification of the terms of the contract to be performed thereunder or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

We undertake to pay Bank Note Paper Mill India Private Limited up to the above amount upon receipt of its first written demand, without Bank Note Paper Mill India Private Limited having to substantiate its demand.

This guarantee will remain in force for a period of sixty days after the currency of this contract and any demand in respect thereof should reach the Bank not later than the above date.

.....
(Signature of the authorized officer of the Bank)
Name, authorisation/ signature no. and designation of the officer
Seal, name & address of the Bank and address of the Branch



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BANK NOTE PAPER MILL INDIA PRIVATE LIMITED

SECTION: XVI

CONTRACT FORM

SHEET 1 OF 1

NOT APPLICABLE TO THIS TENDER DOCUMENT



	BANK NOTE PAPER MILL INDIA PRIVATE LIMITED	SECTION: XVII
LOA	LETTER OF AUTHORITY FOR ATTENDING A BID OPENING	SHEET 1 OF 1

(Refer to clause 24.2 of GIT)

The Chief General Manager
Address

Subject: Authorization for attending bid opening on---- - ---(date) in the Tender of

Following persons are hereby authorized to attend the bid opening for the tender mentioned above on behalf (Bidder) in order of preference given below.

Order of Preference	Name	Specimen Signatures
1.		
2.		
Alternate Representative		
Signature of Bidder or Officer authorised to sign the bid on behalf of Bidder		

Note:

1. Maximum of two representatives will be permitted to attend bid opening. In cases where it is restricted to one, first preference will be allowed. Alternate representative will be permitted when regular representatives are not able to attend.
2. Permission for entry to the hall where bids are opened may be refused in case authorization as prescribed above is not produced.



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BANK NOTE PAPER MILL INDIA PRIVATE LIMITED

SECTION:XVIII

SHIPPING ARRANGEMENTS FOR LINER CARGOES

SHEET 1 OF 1

NOT APPLICABLE TO THIS TENDER DOCUMENT



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BANK NOTE PAPER MILL INDIA PRIVATE LIMITED

SECTION:XIX

PROFORMA OF BILLS FOR PAYMENTS

SHEET 1 OF 1

NOT APPLICABLE TO THIS TENDER DOCUMENT



APQ	BANK NOTE INDIA PAPER MILL PRIVATE LIMITED	SECTION: XX
	APPLICATION- PRE-QUALIFICATION	SHEET 1 OF 5

**Instructions to the Applicants for Furnishing Information
As A Part of Pre-Qualifications Tender Notice**

1. Intending applicants are required to upload their full bio-data giving details about their organization, location of manufacturing units, experience, technical personnel in their organization, spare capacity competence and adequate evidence of their financial standing etc. in the enclosed format which will be kept confidential.
2. While deciding upon the selection of firms, great emphasis will be given on the ability and competence of applicants to do good quality works within the specified time schedule and in close coordination with other agencies, besides the rate structure of the items.
3. The application shall be signed by person / persons on behalf of the organization having necessary authorization / Power of Attorney to do so.
4. If the space in the proforma is insufficient for furnishing full details, such information may be supplemented on separate sheets of paper stating therein the part of the proforma and serial number. Separate sheets shall be used for each part.
5. Applications containing false and /or inadequate information are liable for rejection.



APQ	BANK NOTE INDIA PAPER MILL PRIVATE LIMITED	SECTION: XX
	APPLICATION- PRE-QUALIFICATION	SHEET 2 OF 5

To:

Managing Director
Bank Note Paper Mill India Private Limited
Administrative Building, Entry Gate 1,
Paper Mill Compound,
Note Mudran Nagar,
Mysore - 570003

I / We have read and understood the Pre-qualification tender notice and instructions to the applicants and apply herewith for pre-qualification. . I / We furnish the information in the prescribed format including supplementary sheets fromfor your consideration. I/We do declare that the information furnished is correct and true to the best of my/our knowledge and belief.

Yours faithfully

Signature _____

Name:_____

Designation _____

Address _____

Seal _____



BASIC INFORMATION

1	Name of the applicant / organization and address of the registered office/business office.	
2	(a) Whether bidder is OEM (b) Address of the manufacturing facility in India (c) Annual Capacity of manufacturing facility	Yes / No
3	Type of the organization (whether Sole Proprietorship / Partnership / Private Limited / Limited or Cooperative Body etc).	
4	Name of the Proprietor / Partners / Directors of the Organization / Firm as the case may be.	(a) (b) (C)
5	Details of Registration – (whether Partnership firm, Company etc) – Name of Registering Authority, Date, Registration No etc.	
6	Whether registered with Government / Semi-Government / Municipal Authorities or any other Public Organization as a vendor and if yes provide details thereof.	
7	Experience in the field (Enclose documentary evidence)	_____ Years
8	Address of office through which the proposed work will be handled and the name and designation of the Officer-in-charge.	
9	Names of Bankers and their full addresses	
10	Whether any civil suit / litigation arisen in the contracts executed during the last five years / being executed now. If yes, please furnish the details in the proforma given below.	



Sl. No	Name of the project and employer	Nature of work	PO No. /Agreement No with date	Present stage of work	Value of contract	Brief details of litigation
1						
2						
3						
4						

11. Details of Similar supply completed during last five years ending 30.11.2017.
Number of supplementary sheets attached.

Sl No	Description of work including the capacity of the equipment	Name & Address of Customer	PO No. /Agreement No with date	Qty of supply	Delivery period
1					
2					
3					
4					
5					

(Enclose the Customer certificate/Documentary evidence duly attested by authorised signatory)

12. Financial Details

Sl No	Financial Year	Average Annual Turn Over (Rs)	Profit (Rs)	Loss (Rs)
1	2016-17			
2	2015-16			
3	2014-15			

(Enclose the certified/Audited copy of Profit and loss Account and Balance sheet as documentary evidence)

13. Has the applicant been blacklisted/ debarred by BNPMIPL/ BRBNMPL /SPMCIL or any Govt. Departments. Yes/NO
(If yes please provide the details.)



APQ	BANK NOTE INDIA PAPER MILL PRIVATE LIMITED	SECTION: XX
	APPLICATION- PRE-QUALIFICATION	SHEET 5 OF 5

14. Declaration on the Firm/company/proprietor, if it is closely related to director of the BNPM Yes/No

Signature of the Applicant _____

Name-----

Designation-----

Date-----

Stamp of the Organization-----



APQ	BANK NOTE INDIA PAPER MILL PRIVATE LIMITED	SECTION: XX
	DECLARATION	ANNEXURE- I SHEET 1 OF 1

Tender No: BNPM/TEN/ BP helmets & jackets/ 315 /2017-18 dated 04.12.2017.

(To be submitted on the letterhead)

DECLARATION

We do hereby declare that we have not been blacklisted/ debarred by BNPMIPL/ BRBNMPL /SPMCIL or any Govt. Departments. The information provided above is correct and true to the best of my knowledge and belief. In case, at any time the information furnished is found to be false, you my disqualify/debar me/us as deemed fit.

Signature _____

Name-----

Designation-----

Date-----

Stamp of the Organization-----



APQ	BANK NOTE INDIA PAPER MILL PRIVATE LIMITED	SECTION: XX
	DECLARATION	ANNEXURE- I SHEET 1 OF 1

Tender No: **BNPM/TEN/ BP Helmets & Jackets /315 /2017-18 dated 04.12.2017**

(To be submitted on the letterhead)

DECLARATION

We do hereby declare that we have read and understood all terms and conditions of tender document including GIT, SIT, GCC, SCC, Technical Specification, Quality Control Criteria and confirm to abide to those conditions without any counter conditions.

Signature _____

Name-----

Designation-----

Date-----

Stamp of the Organization-----



Sl No	Description	Requirements of BNPMIPL, Terms & conditions	Ehether agreed by the firm (Yses/No)	Deviation if any
1.	General specifications	Items should be supplied exactly as per the given specifications mentioned in Section VII of the tender and have enclosed catalogue/brochure of the offered item	Yes/No	
2.	Quantity:	As per tender	Yes/No	
3.	Replacement of Rejection of materials	In case of rejection of material supplier shall replace the rejected material within 15 days on his cost	Yes/No	
4.	Delivery terms	As per section -VI	Yes/No	
5.	Payment terms	Payment terms as mentioned in the tender	Yes/No	
6.	Liquidated Damage	Liquidated Damage clause as mentioned in tender	Yes/No	
7.	Warranty	The items should be warranted against defects in material, design, workmanship etc. for a minimum period of 12 months from the date of supply and acceptance. During warranty period, the item should be replaced free of cost at our Store.	Yes/No	

8.	Tender terms & conditions	We have gone through entire tender document thoroughly including GIT (Section II - General Instructions to Tenderer), SIT (Section III - Special Instructions to Tenderer), GCC (Section IV - General Conditions Of Contract), and SCC (Section V - Special conditions of contract) and confirm that we don't have counter conditions. We also understand that offer with counter conditions is liable for rejection	Yes/No	
9.	Customer Certificate/Documentary evidence in support of Technical pre-qualification criteria (Duly certified by signatory authority)	Purchase Order/ Work Order/ Agreement/ work completion certificate	Submitted/ Not submitted	
10.	Certified Copy of Audited Balance Sheet and Profit & loss accounts	FY 2016-17 FY 2015-16 FY 2014-15	Submitted/ Not submitted	
11.	Declaration	Declaration that firm is not debarred/blacklisted	Submitted/ Not submitted	

12.	Performance security / Security Deposit	As per tender	Yes/ No	
13.	Enviro-friendly Packing of Product	The product/item to be supplied should be packed in an environment- friendly manner	Yes / No	

Signature _____

Name-----

Designation-----

Date-----

Stamp of the Organization-----



ACW

BANK NOTE INDIA PAPER MILL PRIVATE LIMITED

SECTION XXI

ADDITIONAL CONDITIONS OF WORKS CONTRACT

SHEET 1 OF 1

NOT APPLICABLE TO THIS TENDER DOCUMENT



IP

BANK NOTE INDIA PAPER MILL PRIVATE LIMITED

ANNEXURE- XXII

INTEGRITY PACT

SHEET 1 OF 1

NOT APPLICABLE TO THIS TENDER DOCUMENT

